

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Appellant(s) : Rick K. SOUTHERN et al.
Application No. : 10/034,446
Filed : December 26, 2001
Examiner : A. Phi Dieu Tran
Art Unit : 3633
For : METHODS FOR ATTACHING SOLID HARDWOOD FLOOR
PLANKS TO CONCRETE FLOOR SURFACES
Confirmation No. : 1727

On Appeal to the Board of Appeals and Interferences

REPLY BRIEF

I. INTRODUCTION

On April 18, 2008, the U.S. Patent and Trademark Office (the "Patent Office") received a Notice of Appeal from the final rejection of claims 1-3, 5-7, 10, 12 and 14-20 contained in the Office Action issued by the U.S. Patent and Trademark Office (the "Patent Office") on October 18, 2007 in the above-identified patent application. On September 15, 2008, an Examiner's Answer (the "Answer") was issued in response to the arguments provided in the filed Appeal Brief

In accordance with 37 C.F.R. § 41.41, this Reply Brief is submitted in response to the arguments raised by the Examiner in the Answer. For at least the reasons set forth below, in which the arguments raised in the Answer are addressed, the prior art of record does not render claims 1-3, 5-7, 10, 12 and 14-20 obvious. Accordingly, Appellants respectfully request that the final rejection of pending claims 1-3, 5-7, 10, 12 and 14-20 be reversed.

II. REPLY TO EXAMINER'S COMMENTS ON ISSUES ON APPEAL

A. There is No Motivation to Combine the References

The Examiner has not shown motivation to combine the references, although the Examiner alleges “[t]he motivation to combine is found in the references themselves.” (Answer, p. 11, Ins. 9-11). Appellants, in the Appeal Brief dated July 18, 2008 (the “Appeal Brief”), clearly set out specific reasons as to why there is no motivation to combine the references of Greenway, Armstrong, Murray, and Searer.

Each cited reference is directed to a different flooring method that achieves a different effect or purpose. First, Searer explicitly teaches to avoid adhesives altogether in floor installation due to their typical toxicity and other drawbacks. Consequently, motivation cannot properly be found to combine the Searer teaching of nailing to a concrete subfloor with any other teaching that uses adhesives. The Searer teaching is plainly incompatible with such other references. (Appeal Brief, p. 17). Greenway, Armstrong, and Murray each require using an adhesive, without nails, on a concrete subflooring. Thus, there is no motivation to combine any of these references with Searer.

Further, Greenway, Armstrong, and Murray teach using nails only on wood subfloorings. Since attaching flooring to wood and concrete have very different requirements and problems, there is no motivation to combine any of the teachings on how to attach flooring to wood, with how to attach flooring to concrete. Specifically, Greenway teaches that when a concrete subflooring is used, the wood flooring is installed only with a mastic; nails, alone without an adhesive, are used when the subflooring is wood (Appeal Brief, pp. 8-9). Greenway’s teaching that mastic or nails, but not both, are used depending on the type of subflooring is consistent with Armstrong’s specification that for concrete, glue-down installation only is used, and that staple-down installation is only used for wood subfloorings. (Appeal Brief, p. 11). Murray teaches a two-component polyurethane adhesive used to bond a construction material to a construction substrate, but nails are not provided. (Appeal Brief, pp. 15-16).

In the Appeal Brief, Appellants specifically set out reasons as to why there is no motivation to combine these references on pages 17-19. The Examiner does not point out the error in any of the reasons as set forth in the Appeal Brief. In fact, the Examiner makes a general conclusory statement that the “motivation to combine *is found in the references themselves.*”

(Answer, p. 11, Ins. 10-12). The Examiner further contends that “Greenway’s teaching is enhanced and improved by the combination of the references as set forth above in the rejection.” (Answer, p. 11, Ins. 10-12). However, the Examiner fails to provide any specific reason as to why the references can be combined, and what in the references, if anything, provides this motivation to combine. “The suggestion or motivation to combine two references may be found in the prior art, the knowledge of one skilled in the art, or the nature of the problem to be solved. When a second reference *identifies the benefits of adding a feature to the primary reference*, an obviousness rejection is proper.” In re Morgan, 87 Fed. Appx. 746 (Fed. Cir. 2004).

The Examiner, not surprisingly, fails to point out any specific teaching in any reference that provides the benefits of adding an adhesive and nailing to a concrete flooring. Further, the Examiner does not argue or point out any error in the numerous reasons provided by the Applicant as to why there is no motivation to combine the references, as set forth in pages 17-19 of the Appeal Brief.

B. The Combination of References is Based on Hindsight Reasoning

The Examiner, in the Answer, alleges that “[a] person of ordinary skill in the art would have found it obvious to modify Greenway’s teaching with Armstrong’s and Searer’s teaching to arrive at the method step of first applying adhesive to the undersurface of the plank and then nailing through the planks into the concrete.” (Answer, p. 11, Ins. 19-22). This argument, however, is flawed.

The Examiner cites various references that teach nailing hardwood floors, or providing an adhesive for gluing the floors. No reference teaches both or suggests that both should be used, let alone for attaching hardwood planks to concrete subflooring. Yet, the Examiner maintains that Greenway can be modified to arrive at the method step of first applying adhesive, and then nailing through the planks into the concrete. The Examiner provides no basis for first applying the adhesive, and then nailing the planks that is based on any knowledge in the prior art. Instead, the Examiner’s arguments are completely based on improper hindsight reasoning.

The Examiner, on page 12, Ins. 3-7, states:

As applicant is well aware, until the adhesive dries, the plank is loose and is subjected to movement. Nailing the planks in place would prevent the planks from

movement before the adhesive dries. Furthermore, having nails *nailing the planks to the concrete floor in addition to the adhesive would enhance the fastening of the plank to the floor, resulting in an enhanced floor structure.*

Interestingly, the Examiner provides these statements without any reference to the prior art, and fails to provide any teaching in the references to provide the nails after the adhesive. As the Federal Circuit stated in Ruiz v. A.B. Chance Co., 357 F.3d 1270 (Fed. Cir. 2004):

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. Envtl. Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 698 (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements."). The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), *then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious.* This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result - often *the very definition of invention.*

Section 103 precludes this hindsight discounting of the value of new combinations by requiring assessment of the invention as a whole. This court has provided further assurance of an "as a whole" assessment of the invention under § 103 by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before the invention itself, to make the new combination. See In re Rouffet, 149 F.3d 1350, 1355- 56 (Fed. Cir. 1998).

The Examiner has done exactly what the Federal Circuit has precluded for an obviousness analysis. The Examiner finds multiple references containing various features alleged to be various parts of the claimed invention, and cites each reference for a different feature without showing any suggestion or motivation to combine the references. For instance, the problem of the planks moving before the adhesive dries is one of the problems the present invention solves, and is a surprising advantage over the prior art, which does indeed provide for an enhanced floor structure. Accordingly, the Examiner does not cite any reference for teaching or suggesting the above feature, and improperly bases his arguments on hindsight reasoning in view of the claims of the present invention.

Even assuming if a combination were made, it could not result in the invention of the claims. For example, it is not proper to combine a reference that warns against using an adhesive on concrete with a reference that is incompatible, and requires exactly the opposite, to arrive at the claimed invention. Additionally, based on the art applied by the Examiner, it is clear that at the time of the invention, the state of knowledge in the art would have been that only nails or adhesives, by themselves, would have been sufficient to attach the hardwood flooring. Consequently, there would have been no suggestion by the combination of the references to mix these two methods of attachment, which would have been considered redundant.

C. Grady, Hirsch and Perkins Declarations

With regard to the Hirsch declarations, the Examiner states “[i]t is not found persuasive as the rejection of the claims based upon Greenway, Armstrong, Murray and/or Searer teaches applicant’s claimed limitations.” (Answer, p. 12, lns. 15-17). With regard to the Perkins declaration, the Examiner again merely states that “[t]he Declaration has been considered and found to be non-persuasive. Examiner has found it obvious to combine the references to arrive at an improved teaching for Greenway.” (Answer, p. 13, lns. 14-16). The Examiner provides no specific evidence to refute any of the facts attested to in the declarations. Again, the Examiner is taking the surprising advantages of the present invention, and improperly using these to argue that since a specific combination of the prior art would be an improvement, that such combination would be obvious.

However, as explained in the Appeal Brief, the Examiner has not provided any basis in the prior art for the motivation to combine the references in the manner argued, instead

relying on the surprising benefits of the present invention to argue that such a combination would be made. Then, to defeat the declarations, the Examiner contends that the declarations are non-persuasive because the combination of references teach or suggest the claims. This circular reasoning and vague, conclusory statements provide for much of the basis of the Examiner's rejections, and cannot be found to be persuasive.

For example, the Examiner ignores the Hirsh declaration dated March 29, 2005, which clearly evidences that the wormholes and/or scratches are known structures in the art, and that these surface features are being used to hide nails, which would otherwise be visible. (Hirsch declaration, p. 7, para. 21). Claim 17 specifically recites that nails are hidden in wormholes and/or scratches such that the floorboards are installed so that the surface features are visible. However, the Examiner, in the Answer, merely states that the reference of Greenway, which provides for nailing grooves, shows the limitation of "wormholes." The Examiner further ignores the Perkins declaration dated August 1, 2007, which specifically points out that wormholes are not "nailing grooves." (Perkins Declaration, p. 6, para. 20). The Examiner ignores this evidence as well.

Wormholes and scratches are structures that are well known in the art by these names and would not require any further definition to clearly define these structures to those having ordinary skill in the art. A wormhole formed in a piece of wood is known to be a hole that resembles those made by worms in nature in old pieces of wood. A person of ordinary skill would know that these are readily distinguishable from regular machined holes due to their rough distribution and shapes. Also, it would have been clear to one of ordinary skill in the art as to what is the structure and appearance of scratches in flooring. Both wormholes and scratches would be understood to look very different than the nailing grooves of Greenway. Moreover, while claim 17 recites that the nails are nailed into the wormholes or scratches and that the floorboards are installed so that the surface features are visible, the nails 14 of Greenway are not nailed into any surface feature that is visible when the boards are installed, since the nailing grooves are positioned to be hidden by the adjacent board. (See Greenway, Figs. 1-2).

D. The References Must Be Considered as a Whole

The Examiner claims that Appellants have attacked the references individually, and that the rejection is based on a the combination of references. (Answer, p. 10, ln. 21 – p. 11,

In. 2). However, in the responses to the Office Actions and the Appeal Brief, Appellants have treated each reference with respect to what they may bring to a suggestion of the claimed invention or a motivation to combine with other references, and have set out supporting reasons and evidence. The references are not treated independently, as the Examiner states. No combination of references would teach or suggest the invention as recited in the claims. For example, as indicated above, the Examiner combines the Searer reference that explicitly teaches excluding adhesives with the other references that use adhesives. The Examiner further ignores that most of the references teach engineered flooring, which has a very different construction and behavior from hardwood flooring, which can warp or twist in response to factors such as humidity and moisture. (Appeal Brief, pp. 11-12).

E. Summary

Accordingly, it is respectfully asserted that there is no motivation to combine the references and that the alleged combination of references does not teach or suggest Appellants' invention as recited in claims 1-3, 5-7, 10, 12, or 14-20 of the above-identified application.

Therefore, Appellants respectfully request the Board to reverse the Examiner's 35 U.S.C. § 103(a) rejections of claims 1-3, 5-7, 10, 12 and 14-20.

III. CONCLUSION

For at least the reasons indicated above, Appellants respectfully submit that the invention recited in the presently rejected claims of the present application, as discussed above, is new, non-obvious and useful. Reversal of the Examiner's rejections of the claims is therefore respectfully requested.

Respectfully submitted,

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